

## CLAIMS

1. An self-enhancing search system comprising:
  - a search system analog system that periodically looks through the search system log and identifies search queries that do not bring satisfactory results;
- 5 a search query analyzer using one or more of the glossary, synonyms, known typographical errors and translated words to provide alternative query terms;
  - relevant document finder based on enhanced queries including the alternative query terms to locate documents not found by the original search; and
  - a linking enhanced query terms with the original search terms to reflect new keywords to
- 10 be searched.
2. The search system of claim 1, wherein the search queries are queries made by customers.
3. The search system of claim 2 including embedding the search query terms unsatisfied queries in the documents located by the enhanced queries.
4. The search system of claim 3 including associated enhanced queries with the
- 15 unsatisfactory queries in the search system log for use with further queries.
5. The search system of claim 4 including ranking the results of searches using the enhanced queries.

6. The search system of claim 5, wherein Query Analyzer module comprises:  
a sub-module that identifies domain specific terms in a given query, using domain specific glossary;  
a sub-module that finds synonyms and related terms for the identified terms, using domain specific thesaurus;
- 5 7. The search system of claim 6, wherein the Document Finder module comprises the following sub-modules:  
a sub-module that finds documents in the identified categories, using the original textual index; and  
a sub-module that filters the found documents to find additional relevant documents, based on the identified domain specific terms, synonyms, related terms, and statistically close terms.
- 15 8. The search system of claim 7, wherein the Index/Meta-data Enhancer module comprises the following sub-modules:  
a sub-module that creates associations (links) between each found document and the given query; and  
a sub-module that adds new doc-query links to the meta-data of the corresponding textual
- 20 index entries.
9. A computer program on a computer useable medium for providing a self-enhancing search system comprising:  
a search system analog system software module that periodically looks through the search system log and identifies search queries that do not bring satisfactory results;
- 25 a search query analyzer software module using one or more of the glossary, synonyms, known typographical errors and translated words to provide alternative query terms;

relevant document finder software module based on enhanced queries including the alternative query terms to locate documents not found by the original search; and

a linking software module enhanced query terms with the original search terms to reflect new keywords to be searched.

5 10. The computer program for search system of claim 9, wherein the search queries are queries made by customers.

11. The computer program for the search system of claim 10 including software for embedding the search query terms unsatisfied queries in the documents located by the enhanced queries.

10 12. The computer program for search system of claim 11 including software for providing associated enhanced queries with the unsatisfactory queries in the search system log for use in connection with further customer queries.

13. The computer program for the search system of claim 12 including software for ranking the results of searches in order of their per tenancy using the enhanced query terms as a ranking  
15 basis.

14. The computer program for search system of claim 13, wherein Query Analyzer module comprises:

a software sub-module that identifies domain specific terms in a given query, using domain specific glossary;

20 a software sub-module that finds synonyms and related terms for the identified terms, using domain specific thesaurus;

a software sub-module that finds other statistically close terms; and

a software sub-module that identifies relevant domain specific categories for the identified terms, using domain specific ontology.

15. The computer program for the search system of claim 14, wherein the Document Finder module comprises the following software sub-modules:

a software sub-module that finds documents in the identified categories, using the original textual index; and

- 5 a software sub-module that filters the found documents to find additional relevant documents, based on the identified domain specific terms, synonyms, related terms, and statistically close terms.

16. The computer program for the search system of claim 15, wherein the Index/Meta-data Enhancer module comprises the following sub-modules:

- 10 a software sub-module that creates associations (links) between each found document and the given query; and

a software sub-module that adds new doc-query links to the meta-data of the corresponding textual index entries.